

REMARKS

This paper is responsive to the Office Action mailed April 23, 2003. Amendment, reexamination and reconsideration of the application are respectfully requested.

In Applicant's Amendment A, the clean version of **claim 1** was presented with a typographical error. The marked-up version of **claim 1** did not include the error. **Claim 1** is being amended in this paper to correct the typographical error presented in the clean claim.

The Office Action

In the Office Action mailed April 23, 2003:

claims 1-3, 8 and 21 were rejected under 35 USC §102(b) as being anticipated by U.S. Patent No. 6,041,323 to Kubota ("Kubota");

claims 4-5 and 7 were rejected under 35 USC §103(a) as being unpatentable over Kubota in view of U.S. Patent No. 5,905,811 to Shiiyama ("Shiiyama");

claim 6 was rejected under 35 USC §103(a) as being unpatentable over Kubota in view of U.S. Patent No. 5,845,305 to Kujiraoka ("Kujiraoka");

claims 9-13 and 18-20 were rejected under 35 USC §103(a) as being unpatentable over Kubota in view of Shiiyama;

claim 14 was rejected under 35 USC §103(a) as being unpatentable over Kubota and Shiiyama in view of U.S. Patent No. 6,345,764 to Knowles ("Knowles");

claims 15 and 16 were rejected under 35 USC §103(a) as being unpatentable over Kubota and Shiiyama in further view of U.S. Patent No. 4,903,229 to Schmidt, et al. ("Schmidt"); and,

claim 17 was rejected under 35 USC §103(a) as being unpatentable over Kubota as modified by Shiiyama and Schmidt and further in view of U.S. Patent No. 6,064,397 to Herregods, et al. ("Herregods").

The Present Application

By way of brief review, the present application is directed to a system and method for automatic and semi-automatic document indexing. The invention is useful where a large document is scanned to generate an electronic version of the document. For example, the invention is used to generate a table of contents or an index for the electronic version of the document (for example, see FIG. 1). A sub-section delimiter definition is determined that is related to the document.

For example, a review of a document may indicate that chapter headings in the document are rendered in an 18-point font at a text location that is centered on a page and is two inches below the top of the page. Then a first sub-section delimiter may be defined as text located two inches from the top of a page and rendered in an 18-point font. Subheadings in the exemplary document can occur anywhere on a page but are rendered in a 16-point font with underlined characters. Therefore, a second sub-section for the document delimiter may be defined as underlined 16-point text.

Once one or more sub-section delimiters are defined, the electronic version of the document is searched to find occurrences of text corresponding to the defined sub-section delimiters. Information regarding each occurrence is used to create an index or table of contents for the document. For example, for each occurrence of 18-point text located two inches from the top of a page, the text string associated with the occurrence is recorded in association with a text location of the occurrence. For example, the text "CHAPTER ONE" was found rendered in 18-point font two inches from a top edge of page 3 of the document. Therefore, the text "CHAPTER ONE" is associated with a page number, such as page 3, and is recorded and included in the index or table of contents. The text location information may be recorded in the form of a hypertext link. Similarly, the text and text location associated with each occurrence of underlined 16-point text is recorded and added to the index or table of contents. For example, the text location recorded may include a page number as well as an indication of a location within the page. Again, the text location information may be recorded in the form of a hyperlink.

The Cited References

In contrast, the primary reference of the Office Action to Kubota is directed to a method of searching for one or more documents including a search string from within a plurality of documents. For example, the method of Kubota may be used to search a database containing a plurality of news articles. A user inputs a search term, such as, for example, "Olympics." The system detects the user input and searches for articles containing the character string input by the user. This search may be done by conventional means. The system outputs the result of the search. For example, the system displays a list of titles 927 (see FIG. 11). Additionally, the system may display text from a document having a high matching factor. The user may select text from other documents to be displayed by clicking the title of a different article. After reading

several articles, the user finds an article that is most like an article the user hopes to find. The user then clicks a -- Search Similar -- button 947. The system detects this input and performs a search according to the method of Kubota. Specifically, a unique character string (a character string that makes the selected document different than the other documents of the earlier search result) is extracted from that article, and a similarity search is performed using that unique character string. The method of Kubota displays the results of the second search showing a list of titles of articles in a window 909 in descending order from the highest matching factor. Text from the document with the highest matching factor may also be displayed in a window 907. Again, the user may change the document whose text is displayed by selecting another title. However, Kubota does not disclose or suggest displaying an index or table of contents of a document.

Kubota uses the phrase -- index file --. However, the -- index file -- of Kubota is not a table of contents or index as those phrases are used in the present application. For example, the -- index file -- of Kubota includes at least three files, a document chain file 302, a position information file 304, an extended character chain file 306 and an extended position file 308. Even though these four files are not necessarily physically different files, it is respectfully submitted that they are clearly not meant to comprise a table of contents or index for use by a human user. Instead, they are meant to facilitate a computerized document searching method of Kubota.

For example, referring to FIG. 3, the character chain file 302 and position information file 304 would record the position of each period within a document. The extended character chain file 306 and the extended position information file 308 record the position of meaningless strings of characters such as ata, bas, dat, e, em, m, and so on. Clearly, the index of Kubota would be far too long and contain far too much information that is meaningless to a human observer to be considered a table of contents or index as disclosed and claimed in the present application.

Furthermore, Kubota does not disclose or suggest that the created index files are displayed. Instead, as explained above, FIG. 11 illustrates a display of search results including a list of document titles 927, a title of a selected document 905 and text 907 from the selected document. It is respectfully submitted that Kubota does not disclose or suggest displaying the character chain file 302, the position information file 304, the extended character chain file 306 or the extended position information file 308.

Therefore, even if Kubota does disclose an index, Kubota does not disclose or suggest displaying an index.

It is respectfully submitted that none of the secondary references cited by the Office Action cure the deficiencies of Kubota.

Shiiyama discloses an imager and an OCR function. However, Shiiyama does not disclose or suggest generating a human-readable index or table of contents. Instead, it is respectfully submitted, the index information referred to by Shiiyama is included in a search file (column 3, lines 49-53). The search file is used by a search program and not directly by a user. A search word is inputted in accordance with an instruction of the search process (S31). The input search word is analyzed into a search key suitable for the searching process (S32). The search key is compared with the search file in the external storage 4 (S33). When an index that is matched with the search key is found, document address information corresponding to such an index is returned to the application side (S34) (column 4, lines 1-8).

As further evidence that the index or search file of Shiiyama is not for use by a human user, Shiiyama does not disclose or suggest displaying the search file to the user. Instead, the display 6 of Shiiyama is for displaying the information inputted from the keyboard/mouse 5, image information inputted from the image scanner 1 or the like, a progress of the process, and a result of the process (column 2, lines 14-18).

Kujiraoka discloses an index creating apparatus. However, there is no motivation in the art to combine the index generating apparatus of Kujiraoka with the information search method and device of Kubota. It is respectfully submitted that in Kubota, it is simply assumed that the character chain files and position information files are correct because they are generated by a computer program for the purposes of the computer program. The character chain files and position information files of Kubota are not for use by a human. Therefore, a human judgment as to the appropriateness of an entry in the chain files or position information files is unnecessary.

Knowles discloses a portable hand held worldwide web access terminal for accessing HTML encoded documents located on the worldwide web. The terminal includes a bar code symbol reader in a hand-supportable housing for reading bar code symbols encoded with information, such as URLs, for use in accessing HTML encoded documents stored in information servers connected to the internet and supporting the TCP/IP standard (Abstract). However, Knowles does not disclose or suggest using a bar

code or a data glyph as a delimiter for use in generating a table of contents or index as disclosed and claimed in the present application.

Schmidt discloses a forms generating and information retrieval apparatus comprising a compact disc for storing machine readably a plurality of form files and magnetic media for storing machine readably a plurality of information files. Schmidt is unconcerned with generating an index for a document.

Herregods discloses a method for creating multiple documents having identical background regions and page-specific information regions. Herregods is unconcerned with generating an index or a table of contents for a document.

The Claims are Unanticipated

Claims 1-3, 8 and 21 were rejected under 35 USC §102(b) as being anticipated by Kubota. However, **claim 1** recites a method operative to automatically generate an index for a document. The method comprises determining a sub-section delimiter definition, searching the document to find occurrences of items corresponding to the defined sub-section delimiter, and creating the index for the document from the found items corresponding to the sub-section delimiter occurrences.

In rejecting **claims 1-3, 8 and 21**, the Office Action asserts that Kubota teaches an information search method including a “division information in document” which is typically a delimiter in a sentence, such as, “.” or “;”, “Chapter 1”, “Summary”, a blank line or a blank character(s). The Office Action also asserts that Kubota discloses that the document may be divided into blocks by detecting line feed, a period, punctuation, “Chapter X” or “Section X”, detection a blank line, or detecting a paragraph number in a patent specification, or a certain number of characters may be incorporated as one block.

However, Kubota does not disclose or suggest determining a sub-section delimiter definition. It is respectfully submitted that Kubota merely recognizes that documents include delimiters such as periods, commas, chapter headings, blank lines, and the like, and that information regarding these elements of a document are included in character chain and position information files **302, 304, 306, 308**. Dividing a document into blocks based on detected line feeds, periods, punctuation, “Chapter X” or “Section X”, a blank line, a paragraph number or on the basis of a certain number of characters is merely a convenient way to assign position information to the elements of the character chain file **302** and the extended character chain file **306**.

Kubota does not disclose or suggest determining a sub-section delimiter definition, searching the document to find occurrences of items corresponding to the defined sub-section delimiter and creating an index for the document from the found items corresponding to the sub-section delimiter occurrences. Instead, Kubota discloses generating a character chain file in regard to a document, generating a position information file **304** in relation to the character chain file **302**. The position information file **304** can include a block number, a paragraph number, a line number or other position identifying information for each element in the character chain file **302**. It is respectfully submitted that the elements of the character chain file include every number, punctuation mark and word found within the document. Kubota also discloses generating an extended character chain file **306** in association with an extended position information file **308**. The extended character chain file includes every occurrence of portions of words such as ata, bas, dat, e, em, m, se, ste, and so and so forth. The delimiters referred to in the Office Action are included, for example, in the character chain file **302**. However, they are not predetermined, and Kubota does not disclose or suggest searching the document to find occurrences of text corresponding to a defined delimiter. Instead, every element in the document is recorded in a chain file. Kubota does not disclose or suggest creating an index for the document from the found items corresponding the sub-section delimiter occurrences. Instead, Kubota discloses creating a character chain file and an extended character chain file including not only every occurrence of every word and punctuation mark but also every occurrence of portions of words.

For the foregoing reasons, **claim 1** as well as **claims 2-8** which depend therefrom, is unanticipated by Kubota.

Claim 2 recites determining a sub-section delimiter comprises indicating at least one of a font size, a font, a text string, a text location, a symbol and a specific point within the document. As explained above, Kubota does not disclose or suggest a method operative to automatically generate an index for a document comprising determining a sub-section delimiter by indicating at least one of a font size, a font, a text string, a text location, a symbol and a specific point within the document. It is respectfully submitted that the generation of chain file and position information files of Kubota occurs automatically without any determining or indicating of a sub-section delimiter.

For the foregoing additional reasons, **claim 2** is unanticipated by Kubota.

Claim 3 recites determining a sub-section delimiter comprises using a symbol representing a demarcation point on a printed version of the document as the sub-section delimiter. In rejecting **claim 3**, the Office Action does not assert nor does (it is respectfully submitted) Kubota disclose or suggest determining a sub-section delimiter comprising using a symbol representing a demarcation point on a printed version of a document as the sub-section delimiter.

For the foregoing additional reason, **claim 3** is unanticipated by Kubota.

Claim 8 recites determining a sub-section delimiter definition comprises displaying a plurality of document pages on a user interface, selecting at least one demarcation point on at least one of the plurality of pages, and using the at least one demarcation point as the defined sub-section delimiter. The Office Action does not specify a specific reason for rejecting **claim 8**. Furthermore, it is respectfully submitted that Kubota does not disclose or suggest displaying a plurality of document pages on a user interface, selecting at least one demarcation point on at least one of the plurality of pages, and using the at least one demarcation point as the defined sub-section delimiter.

For the foregoing additional reasons, **claim 8** is unanticipated by Kubota.

Claim 21 recites the automatically generated index is an automatically generated table of contents of the document, and the items corresponding to the defined sub-section delimiter are chapter titles displayed in an order in which they appear in the document. The Office Action asserts that Kubota teaches that the created index files are displayed. In support of this assertion, the Office Action directs the attention of the Applicant to FIG. 11 of Kubota. However, FIG. 11 does not disclose or suggest displaying a created index file. The created index file of Kubota includes the character chain file 302, position information file 304, extended character chain file 306, and extended position information file 308 depicted in FIG. 3 and FIG. 4 of Kubota. Clearly, these files are not depicted in FIG. 11. Instead, FIG. 11 shows an entry area 901 for entering a search term, a list of titles 927 of documents associated with the search term, a title 905 of a currently selected one of the documents, and text 907 from the selected document. None of the windows in FIG. 11 of Kubota disclose or suggest displaying an index or table of contents of any of the documents.

For the foregoing additional reasons, **claim 21** is unanticipated by Kubota.

The Claims are Unobvious

Claims 4-5 and **7** were rejected under 35 USC §103(a) as being unpatentable over Kubota in view of Shiiyama. **Claims 4, 5** and **7** depend from **claim 1** and are unanticipated and unobvious for at least those reasons.

Additionally, **claim 4** recites searching the document comprises searching an electronic version of the document for one of characters and objects corresponding to the defined sub-section delimiter. It is respectfully submitted that Kubota does not disclose or suggest searching an electronic version of a document. Kubota merely discloses generating chain files. It is respectfully submitted that there is no searching involved in the generation of a chain file.

The searching for documents disclosed by Kubota does not include searching for items corresponding to sub-section delimiters. Instead, Kubota discloses searching for strings. Furthermore, it is respectfully submitted that the searching disclosed by Kubota is not done within documents or electronic versions of documents, but rather within the chain files generated regarding the documents.

For the foregoing additional reasons, **claim 4** is unanticipated and unobvious in light of Kubota and Shiiyama taken alone or in any combination.

Claim 7 recites selecting an exemplary sub-section title, performing one of document recognition and optical character recognition on the selected exemplary sub-section title, and using at least one recognized property of the exemplary sub-section title as a sub-section delimiter definition. In rejecting **claim 7**, the Office Action admits that Kubota fails to teach selecting an exemplary sub-section title, performing one of document recognition and optical character recognition on the selected exemplary sub-section title and using at least one recognized property of the exemplary sub-section title as a sub-section delimiter definition.

The Applicant assumes the Office Action relies on Shiiyama for disclosure of selecting an exemplary sub-section title. However, the Office Action makes no assertion that Shiiyama discloses selecting an exemplary sub-section title. Instead, the Office Action asserts that, “Shiiyama teaches searching the data for one of characters.” In support of this assertion, the Office Action directs the attention of the Applicant to column 2, lines 60-74 of Shiiyama. However, the referenced section recites, “when the likelihood is smaller than Th1 in S5 in order to store a plurality of recognition results for image data of one character code, a delimiter is outputted as identification (hereinbelow

referred to as an ID) information (S7)”. It is respectfully submitted that this is not a disclosure of selecting an exemplary sub-section title.

For the foregoing additional reasons, **claim 7** is unanticipated and unobvious in light of Kubota and Shiiyama taken alone or in any combination.

Claim 6 was rejected under 35 USC §103(a) as being unpatentable over Kubota in view of Kujiraoka. In rejection **claim 6** the Office Action asserts that Kubota teaches that the created index files are displayed and directs the attention of the Applicant to FIG. 11 in support of the assertion. However, as explained above, Kubota does not teach that the created index files are displayed. Furthermore, as explained above, Kubota does not disclose or suggest creating an index as disclosed and claimed in the present application. The index of Kubota is not for viewing or use by a human. Therefore, even if Kujiraoka teaches to inspect whether or not the index word is appropriate, the references do not disclose or suggest all the elements for which they are relied upon.

For the foregoing reasons, **claim 6** is unanticipated and unobvious in light of Kubota in view of Kujiraoka.

Claims 9-13 and 18-20 were rejected under 35 USC §103(a) as being unpatentable over Kubota in view of Shiiyama. In rejecting **claims 9, 18 and 20**, the Office asserts that Kubota teaches an information search method including a “division information in document.” However, as explained above, Kubota does not teach searching for said division information. Instead, Kubota teaches recording the positions of the division information along with the positions of every other element of the documents and assigning block numbers to the division information. It is submitted that the block numbers are then used as a means to indicate the positions of other elements listed in the character chain files.

Additionally, **claim 9** recites a delimiter searcher operative to search for and record information regarding occurrences of a defined delimiter within the electronic version of the document. Kubota does not disclose or suggest a delimiter searcher operative to search for and record information regarding occurrences of a defined delimiter. Instead, as explained above, Kubota discloses indiscriminately recording information regarding occurrences of every element with the electronic version of the document, or if not every element, a large number of elements including not only words, but punctuation marks, numbers and portions of words (302, 306).

Claim 18 recites defining a sub-section delimiter, searching a recognized version of a document to find occurrences of items that correspond to the defined sub-section delimiter, and using the found items to separate the document into separate sections. Arguments similar to those submitted in support of **claim 9** are submitted in support of **claim 18**. It is respectfully submitted that Kubota does not disclose or suggest defining a sub-section delimiter and searching the recognized version of the document to find occurrences of items that correspond to the defined sub-section delimiter.

For the foregoing reasons, **claim 9**, as well as **claim 10-17** which depend therefrom, and **claim 18**, as well as **claims 19-20** which depend therefrom, are unanticipated and unobvious in light of Kubota and Shiiyama taken alone or in any combination.

Claim 20 recites defining a sub-section delimiter comprises marking a paper version of the document with at least one special demarcation symbol prior to scanning the document. Neither Kubota nor Shiiyama disclose or suggest, nor does the Office Action assert that Kubota or Shiiyama suggest, defining a sub-section delimiter comprises marking a paper version of the document with at least one special demarcation symbol prior to scanning the document.

For the foregoing additional reasons, **claim 20** unanticipated and unobvious in light of Kubota and Shiiyama taken alone or in any combination.

Claim 10 recites a delimiter designator module operative to communicate with the document processor operator through the user interface in order to generate at least one delimiter designation. In rejecting **claims 10** and **11**, the Office Action asserts that Kubota teaches a display which is a user interface displaying information transferred from a computer/document processor to the user/document processor operator and a keyboard for inputting a command or character string to be searched that serves as a delimiter designator module. In support of these assertions, the Office Action directs the attention of the Applicant to column 8, lines 55+. However, column 8, lines 55+, describe a hardware configuration for a preferred embodiment of the invention of Kubota (column 8, lines 27-28) which is an information search method, an apparatus for searching a document to be searched from one or more documents searchably stored in a computer, said documents to be searched having a character string similar to a partial input character string which exists in an input document input in the computer (claim 11), or an apparatus for evaluating similarity between a comparison document and an input document containing a unique character string input into a computer system, said

computer system containing a comparison document searchably stored by the computer (claim 14). It is respectfully submitted that Kubota does not disclose or suggest a document processor as disclosed and claimed in the present application. Furthermore, a character string to be searched is not a sub-section delimiter as disclosed and claimed in the present application. The interface of Kubota is for communicating with the document searcher or researcher. Kubota does not disclose or suggest communicating with a document processor operator.

Claim 11 recites the delimiter designator is operative to accept an indication of at least one of a font size, a font, a text string, a text location, a symbol, and a specific point within the document as a delimiter designation. While Kubota discloses an interface accepting an indication of a text string, the interface is not a delimiter designator nor is the text string a delimiter designation. Furthermore, it is respectfully submitted that neither Kubota nor Shiiyama disclose or suggest accepting an indication of a font size, a font, a text string, a text location, a symbol, or a specific point within the document as a delimiter designation.

For the foregoing reasons, neither Kubota nor Shiiyama disclose or suggest a delimiter designator module, and **claims 10 and 11** are unanticipated and unobvious in light of Kubota and Shiiyama taken alone or in any combination.

Claim 12 recites the delimiter designator is operative to display a plurality of document portions on the user interface for the document operator to view while determining the at least one delimiter designation. In rejecting **claims 12, 13 and 19**, the Office Action asserts that Kubota discloses that a search character input module preferably consists of a dialog box in the multi-window environment or the desired characters to be searched are input through the keyboard and displayed in the input box and that the titles of input documents are displayed on the display screen.

However, the titles of input documents are not a plurality of portions of a document. Instead, they are a plurality of portions of a plurality of documents. Furthermore, Kubota does not disclose or suggest displaying the titles for a document operator to view while determining the at least one delimiter designation. Instead, Kubota discloses displaying the titles after a document searcher enters a search string and the system of Kubota has searched a plurality of documents for the search string.

For the foregoing additional reasons, **claim 12**, as well as **claim 13** which depends therefrom, is unanticipated and unobvious in light of Kubota and Shiiyama taken alone or in any combination.

Furthermore, **claim 13** recites the user interface is operative to receive demarcation point designations from the document processor operator and deliver the demarcation point designations to the delimiter designator as delimiter designations. Neither Kubota nor Shiiyama disclose or suggest, nor does the Office Action assert that Kubota or Shiiyama disclose or suggest, a user interface is operative to receive demarcation point designations from a document processor operator or the delivery of demarcation point designations to a delimiter designator as delimiter designations.

For the foregoing additional reasons, **claim 13** is unanticipated and unobvious in light of Kubota and Shiiyama taken alone or in any combination.

Claim 19 recites defining a sub-section delimiter comprises at least one of building a sub-section delimiter from a list of predetermined potential sub-section delimiter components, performing statistical analysis on recognized characters to select characteristics that are most likely to be associated with sub-section delimiters, entering a sub-section delimiter through keyboard strokes, entering a sub-section delimiter by selecting symbols on a displayed portion of the electronic version of the document, and designating at least one demarcation point on at least one displayed portion of the electronic document to create a list of demarcation points to be used as a set of delimiter definitions.

Kubota discloses entering a search term through keyboard strokes. However, as explained above, a search term is not a sub-section delimiter as disclosed and claimed in the present application. Furthermore, neither Kubota nor Shiiyama disclose or suggest building a sub-section delimiter from a list of predetermined potential sub-section delimiter components. Neither Kubota nor Shiiyama disclose or suggest performing statistical analysis on recognized characters to select characteristics that are most likely to be associated with sub-section delimiters. Neither Kubota nor Shiiyama disclose or suggest entering a sub-section delimiter by selecting symbols on a displayed portion of the electronic version of the document, and neither Kubota nor Shiiyama disclose or suggest designating at least one demarcation point on at least one displayed portion of the electronic document to create a list of demarcation points to be used as a set of delimiter definitions.

For the foregoing additional reasons, **claim 19** is unanticipated and unobvious in light of Kubota and Shiiyama taken alone or in any combination.

Claim 14 was rejected under 35 USC §103(a) as being unpatentable over Kubota as modified by Shiiyama and in further view of Knowles. **Claim 14** recites a delimiter

searcher is operative to search for a defined delimiter comprising a symbol selected from a bar code and a data glyph. In rejecting **claim 14**, the Office Action admits that neither Kubota nor Shiiyama teach that a delimiter searcher is operative to search for a defined delimiter comprising a symbol selected from a bar code and a data glyph. The Office Action relies on Knowles for such a teaching and asserts that Knowles teaches a document containing bar codes.

However, as explained above, Knowles teaches a document containing a bar code encoded with information, such as URLs, for use in accessing HTML encoded documents stored in information servers connected to the Internet and supporting the TCP/IP standard. Kubota, Shiiyama and Knowles do not disclose or suggest a bar code or a data glyph defining a delimiter for a delimiter searcher or searching for a bar code or data glyph as disclosed and claimed in the present application.

For the foregoing additional reasons, **claim 14** is unanticipated and unobvious in light of Kubota, Shiiyama and Knowles taken alone or in any combination.

New **claim 22** contains subject matter from **claim 2**. However, new **claim 22** does not recite that determining a sub-section delimiter comprises indicating a text string. Even if the Examiner finds that Kubota discloses determining a sub-section delimiter comprises indicating a text string, **claim 22** is unanticipated and unobvious because **claim 22** recites only that determining a sub-section delimiter comprises indicating at least one of a font size, a font, a text location, a symbol and a specific point within the document. The references do not disclose or suggest, nor does the Office Action assert that the references disclose or suggest, determining a sub-section delimiter comprises indicating at least one of a font size, a font, a text location, a symbol and a specific point within the document.

New **claim 23** also recites subject matter from **claim 2**. However, **claim 23** does not recite determining a sub-section delimiter comprises indicating a text string or a text location. Even if the Examiner finds that Kubota discloses determining a sub-section delimiter comprises indicating a text string or a text location, **claim 22** is allowable because the references do not disclose or suggest, nor does the Office Action assert that the references disclose or suggest, determining a sub-section delimiter comprises indicating at least one of a font size, a font, a symbol or a specific point within the document.

New **claim 24** includes subject matter from **claim 4**. Arguments similar to those submitted in support of **claim 4** are submitted in support of **claim 24**. Additionally, new **claim 24** depends from new **claim 22** and is allowable for at least that additional reason.

New **claim 25** also includes subject matter from **claim 4**. Arguments similar to those submitted in support of **claim 4** are submitted in support of **claim 25**. Additionally, new **claim 25** depends from **claim 23** and is allowable for at least that additional reason.

New **claim 26** contains subject matter from **claim 11**. However, new **claim 26** does not recite that the delimiter designator is operative to accept a text string. Arguments similar to those submitted in support of new **claim 22** are submitted in support of new **claim 26**.

New **claim 27** also includes subject matter from **claim 11**. However, new **claim 27** does not recite that the delimiter designator is operative to accept an indication of a text string or a text location. Arguments similar to those submitted in support of new **claim 23** are submitted in support of new **claim 27**.

New **claim 28** includes subject matter from **claim 19**. However, new **claim 28** does not recite that defining a sub-section delimiter comprises entering a sub-section delimiter through keyboard strokes. Even if the Examiner finds that Kubota discloses entering a sub-section delimiter through keyboard strokes, new **claim 28** is allowable because the references do not disclose or suggest, nor does the Office Action assert that the references disclose or suggest, defining a sub-section delimiter comprises at least one of building a sub-section delimiter from a list of predetermined potential sub-section delimiter components, performing statistical analysis on recognized characters to select characteristics that are most likely to be associated with sub-section delimiters, entering a sub-section delimiter by selecting symbols on a displayed portion of the electronic version of the document, and designating at least one demarcation point on at least one displayed portion of the electronic document to create a list of demarcation points to be used as a set of delimiter definitions.

For the foregoing reasons, new **claims 22-28** are unanticipated and unobvious in view of Kubota, Shiiyama, Kujiraoka, Knowles, Schmidt and Herregods taken alone or in any combination.

CONCLUSION

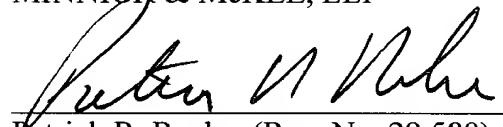
Claims 1-21 remain in the application. **Claims 22-28** have been added. For the reasons cited above, the application is in condition for allowance. Accordingly, an early indication thereof is requested.

Telephone Interview

In the interests of advancing this application to issue and compact prosecution, the Applicant respectfully requests that the Examiner telephone the undersigned to discuss any of the foregoing with which there may be some controversy or confusion or to make any suggestions that the Examiner may have to place the case in condition for allowance.

Respectfully submitted,

FAY, SHARPE, FAGAN,
MINNICH & MCKEE, LLP



Patrick R. Roche (Reg. No. 29,580)
Thomas Tillander (Reg. No. 47,334)
1100 Superior Avenue, Seventh Floor
Cleveland, Ohio 44114-2518
(216) 861-5582